

REMARKS/ARGUMENTS

Claims 1-20 are pending in the application. Claims 15-17 have been canceled without prejudice or disclaimer, claims 1, 2, 4-14 and 18 have been amended, and new claims 21-33 have been added and supported by the specification at least on page 2, lines 4 and 5, page 1, lines 18-20, page 1, lines 23-37, page 4, line 10, page 5, lines 5-13, page 7, lines 8-20, Table 1, Table 2 and Figure 3. No new matter has been added. Reconsideration of the claims is respectfully requested.

Applicant thanks the Examiner for conditional allowance of Claims 5-6.

Applicant thanks the Examiner for consideration of the Information Disclosure Statements filed on February 13, 2004 and April 26, 2004.

Claim Objections

On page 2 of the Office Action, the Examiner objects to claims 12-17, asserting that claims 12-14 and claims 15-17 represent duplicate sets, and requests that that one of these sets be removed.

With this amendment, Applicant has cancelled claims 15-17. The objection is overcome and Applicant respectfully requests that it be withdrawn.

On page 3 of the Office Action, the Examiner objects to claims 1, 2, 4-14 and 18 because they include parentheses around the labels for the claim sections, and suggests removing the parentheses.

Applicant disagrees that there is procedural support for issuing this rejection, but has amended the application for clarification purposes and to facilitate allowance of the claims. Claims 1, 2, 4-14 and 18 have been amended to remove the parentheses from the claim sections. In addition, claim 1 is amended to change the first sets of labels (i), (ii), and (iii) to 1), 2), and 3). These amendments do not affect the scope of the claims in any way. No new matter is added. The objection is overcome and Applicant respectfully requests withdrawal of the objection.

Claim Rejections - 35 USC § 112

On page 3 of the Office Action, claims 18-20 are rejected under 35 U.S.C. § 112 first paragraph for being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. The Applicant respectfully traverses this rejection, but has amended the application to clarify the claim and facilitate allowance. Claim 18 has been amended to remove the “when” clause, thereby incorporating the limitations of the “when” clause into claim 18, and to correct for errors in antecedent basis. The scope of claim 18 is unchanged by this amendment. No new matter is added.

Claim Rejections - 35 USC § 103

On page 4 of the Office Action, claims 1-4 and 7-20 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,697,197 (“Sedlmayr”).

Sedlmayr discloses an optical system in which light from an unpolarized source is collimated, then split by a polarizing beamsplitter into two orthogonally polarized beams. The polarization state of one beam is rotated by 90 degrees to match that of the other beam, then both beams are directed by various mirrors to form a polarized output beam. The footprint of the output beam is set by the shape and orientation of the various mirrors, so that the output beam can closely match a rectangular panel without wasting a great deal of light. (See, for instance, FIG. 3.) Sedlmayr further discloses splitting and recombining the beams with wavelength-sensitive filters, so that red, green and blue beams may individually pass through respective red, green and blue LCD panels. (See FIG. 8.)

Sedlmayr discloses shifting the wavelength cutoffs (or edges) of wavelength-sensitive filters to correct for the balance of the three colors. (column 48, lines 15-18) However, Sedlmayr does not provide a method for determining how to shift the wavelength cutoffs, and does not disclose anything about the properties of the white light produced after the three beams are combined. In addition, Sedlmayr fails to disclose anything concerning the color coordinates x and y, beyond using them as axis labels in CIE color diagrams shown in FIGs. 10A and 10B.

As used in the present invention, the color coordinates precisely describe how a color is perceived by the human eye, and quantify how closely two particular colors match. For instance, Table 2 in the present application shows two values of color coordinates (x,y) – a desired set (labeled “required”), and an achieved set. The difference between the desired and achieved values may be used as a figure of merit, where particular quantities are varied, the “achieved” set of color coordinates is calculated, and the difference between “desired” and “achieved” is minimized. When the “achieved” set is sufficiently close to the “desired” set, then the particular colors are sufficiently close. Sedlmayr does not disclose, teach or suggest any such use of the color coordinates.

As a result, Sedlmayr fails to teach or disclose “specifying desired color coordinates for red light, green light, and blue light”, as recited in claim 1 step A, or “specifying desired color coordinates for white light produced by the splitting/filtering/recombining process”, as recited in claim 1 step B, or reducing differences between sets of color coordinates as recited in claim 1 steps a and b. Because Sedlmayr fails to disclose color coordinates, Sedlmayr fails to teach or suggest the color coordinates recited in claim 1.

Three criteria must be met to establish a *prima facie* case of obviousness. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference. Second, there must be a reasonable expectation of success. Finally, the prior art reference, or combination of references, must teach or suggest all the claim limitations. MPEP § 2142. Applicant respectfully traverses the rejection since the prior art fails to disclose all the claim limitations. Applicant believes current claim 1 is in condition for allowance. Reconsideration, allowance, and notice to that effect are respectfully requested.

Dependent claims 2-4 and 7-17, which are dependent from independent claim 1, were also rejected under 35 U.S.C. §103(a) as being unpatentable over Sedlmayr. While Applicant does not agree with the particular rejections to these dependent claims, it is believed that these rejections are moot in view of the remarks made in connection with independent claim 1. These dependent claims include all of the limitations of the base claim and any intervening claims, and recite additional features which further distinguish these claims from the cited references. Therefore, dependent claims 2-4 and 7-17 are also in condition for allowance. Reconsideration, allowance, and notice to that effect are respectfully requested.

Independent claim 18 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Sedlmayr.

There are several elements in claim 18 that are neither disclosed nor suggested by Sedlmayr, including at least the elements of “a plurality of color filters having measured 50% cutoff points”, “a plurality of ideal filters defined from the measured 50% cutoff points”, “a plurality of filtered lights produced by mathematically applying the plurality of ideal filters to $S(\lambda)$ ”, “a simulated white light produced by mathematically combining the plurality of filtered lights and having a calculated photopic weighted intensity $Y_b(\lambda)$ ”, and “wherein an integral of $Y_b(\lambda)$ over the visible spectrum is at least 75% of an integral of $Y(\lambda)$ over the visible spectrum.” Because none of these elements recited by claim 18 are present or are taught or suggested by claim 18, the office action fails to establish a prima facie case of obviousness. The rejection to claim 18 is overcome and should be withdrawn. Reconsideration, allowance and notice to that effect are respectfully requested.

Dependent claims 19-20, which are dependent from independent claim 18, were also rejected under 35 U.S.C. §103(a) as being unpatentable over Sedlmayr. While Applicant does not agree with the particular rejections to these dependent claims, it is believed that these rejections are moot in view of the remarks made in connection with independent claim 18. These dependent claims include all of the limitations of the base claim and any intervening claims, and recite additional features which further distinguish these claims from the cited references. Therefore, dependent claims 19-20 are also in

condition for allowance. Reconsideration, allowance, and notice to that effect are respectfully requested.

Allowable Subject Matter

On page 13 of the Office Action, claims 5 and 6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form.

Accordingly, claims 5 and 6 are amended to appear in independent form, including all the limitations of claim 1. Withdrawal of the objection, allowance of the claims, and notice to that effect are respectfully requested.

Conclusions

In view of the amendments and reasons provided above, it is believed that all pending claims are in condition for allowance. Applicant respectfully requests favorable reconsideration and early allowance of all pending claims.

If a telephone conference would be helpful in resolving any issues concerning this communication, please contact Applicant's attorney of record, George Jonas, at (651) 736-6933.

Respectfully submitted,

Altera Law Group, LLC
Customer No. 22865

Date: April 26, 2006

By: _____



Ronald E. Gerber
Reg. No. 57,166
REG/mar